

IN THE CLAIMS:

The text of all pending claims are set forth below. Cancelled and withdrawn claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (previously amended), (cancelled), (withdrawn), (new), (previously added), (reinstated - formerly claim #), (previously reinstated), (re-presented - formerly dependent claim #) or, (previously re-presented).

Please CANCEL claim 1-10, and ADD new claims 11-27 in accordance with the following:

1-10 (cancelled)

11. (new) A method for transmitting signals in a radio communication system, comprising:

transmitting signals from a first radio station via at least two intermediate stations to a second radio station; and

signaling between the at least two intermediate stations to configure transmission from the first radio station to the second radio station .

12. (new) The method in accordance with claim 11, wherein characteristic quantities are signaled between the at least two intermediate stations and the first and/or second radio station.

13. (new) The method in accordance with claim 11, wherein characteristic quantities are determined in the intermediate stations from signals received from the first and/or second radio station.

14. (new) The method in accordance with claim 12, wherein the characteristic quantities are used in the intermediate stations to determine weighting factors.

15. (new) The method in accordance with claim 14, wherein the characteristic quantities contain information on channel properties.

16. (new) The method in accordance with claim 15, wherein information on the channel properties is updated only if there is a change in channel properties.

17. (new) The method in accordance with claim 11, wherein antenna devices of the at least two intermediate stations are configured to correspond to antenna elements of a smart antenna.

18. (new) The method in accordance with claim 11, wherein signals are transmitted from the first radio station to the second radio station via a plurality of intermediate stations located in a radio coverage area of the first radio station and via a plurality of intermediate stations located in a radio coverage area of the second radio station, antenna devices of the intermediate stations located in the radio coverage area of the first radio station are grouped to form a first smart antenna, and antenna devices of the intermediate stations located in the radio coverage area of the second radio station are grouped to form a second smart antenna.

19. (new) The method in accordance with claim 11, wherein pre-equalization or equalization procedures are used in the intermediate stations for data transmission.

20. (new) The method in accordance with claim 11, wherein transmission between the at least two intermediate stations takes place in accordance with a single frequency network.

21. (new) The method in accordance with claim 13, wherein the characteristic quantities are used in the intermediate stations to determine weighting factors.

22. (new) The method in accordance with claim 21, wherein the characteristic quantities contain information on channel properties.

23. (new) The method in accordance with claim 22, wherein information on the channel properties is updated only if there is a change in channel

properties.

24. (new) The method in accordance with claim 23, wherein antenna devices of the at least two intermediate stations are configured to correspond to antenna elements of a smart antenna.

25. (new) The method in accordance with claim 24, wherein signals are transmitted from the first radio station to the second radio station via a plurality of intermediate stations located in a radio coverage area of the first radio station and via a plurality of intermediate stations located in a radio coverage area of the second radio station, antenna devices of the intermediate stations located in the radio coverage area of the first radio station are grouped to form a first smart antenna, and antenna devices of the intermediate stations located in the radio coverage area of the second radio station are grouped to form a second smart antenna.

26. (new) The method in accordance with claim 25, wherein pre-equalization or equalization procedures are used in the intermediate stations for data transmission.

27. (new) The method in accordance with claim 26, wherein transmission between the at least two intermediate stations takes place in accordance with a single frequency network.